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Scenario 1: A fishing lake was stocked with a certain amount of bass and the bass population decreases every year. The population of bass in the lake after $x$ years is represented by the function $y=300-25 x$.
a. What is the $x$-intercept and $y$-intercept? Interpret in terms of the scenario.
b. What is the domain of the function?
c. What is the range of the function?
d. What is the slope of the function? Explain what the slope means in terms of the problem scenario.

Scenario 2: Alex's goal is to sell $\$ 100$ worth of tickets to the school play. The tickets are $\$ 4$ for students and $\$ 10$ for adults. This scenario is represented by $4 x+10 y=100$.
a. What is the $x$-intercept and $y$-intercept? Interpret in terms of the scenario.

